

Luis Angel Espino Cervantes, Software Engineer

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Education: University of California, Irvine

June 2022

Bachelor of Science in Computer Science: Visual Computing

GPA: 3.18 (Dean's List UC Irvine • 5 quarters)

Course Work: Software Design • Game Systems and Design • Data Management • Computer Vision & Graphics

Areas of Expertise:

✓Python	✓Node.js	✓SQL	✓WebGL	✓Biliterate (Spanish)
✓C/C++	✓IonicJS	✓Linux	✓MatLab	✓WebDev
✓JavaScript	✓A-Frame	✓R	✓OpenCV	✓Agile & DevOps
✓HTML/CSS	✓Angular	✓Microsoft Office	✓Point Cloud Library	✓Data Analysis

Work Experience:

Autonomous Vehicle Operator: Zoox

October 2022-Present

Safely monitor L3 autonomous vehicle testing. Command and troubleshoot vehicle software/hardware in real-time using **Linux** commands. Record and report substantial vehicle data performance.

Instructor: Juni Learning

April 2022-October 2022

Teach Computer Science concepts using python to K-12 students in remote one-on-one sessions.

Office Intern: San Mateo County Health Clinic

June 2018-September 2018

Front desk attendant responsible for checking-in patients, updating personal information, facilitating their visits, and answering the main phone. Multitask taking care of the waiting room, printer refills, and faxes.

Projects:

Water Simulator

April 2022-June 2022

WebGL interactive animation of a water pond with some objects interacting with it. The simulator renders a scene of a water surface reacting with two cubes. The scene features realistic lighting & visual effects.

- Introduced visual properties (**Blinn-Phong lighting, reflection, and fresnel effect**) on the shader for realism.
- Adapted simulation into a [webpage](#) using **JavaScript** and **HTML** for public interaction.
- Researched physics on water behavior when touched and implemented similar movements in **WebGL**.

Image Recognition Software

January 2022-February 2022

AI algorithm that learns an object's Histogram of Gradient Orientations by using positive and negative picture samples. It then can identify the same object in static images.

- Created software that is able to recognize specific objects in pictures with a 95% success rate.
- Wrote the function algorithm that learns an object's features from a series of sample images.
- Coded, tested, debugged, and finalized the software using **Python**, **Matplotlib**, and **Numpy** libraries.

Spotify Browser

February 2022

A website that searches Spotify's database in real-time. Each search creates a new custom page based on the retrieved data from Spotify's API.

- Constructed front-end features to display album, track, or artist searches using **HTML**, **CSS**, and **Angular** components to enhance User Interaction.
- Build the back-end **API** handling for each search request using **Express.js** and the **OAuth** protocol.

Vaccine Dash (Videogame) Website

September 2021-December 2021

A single-player adventure horror web game designed and developed by a team of five. The game consists of finding vaccines in a covid-filled dark hospital.

- Integrated player controls and physics of the game, as well as visuals and audio effects into the game levels.
- Developed a narrative for the game and increased player relatability.
- Introduced the game and features in a mock product pitch.

Sleep Tracker (Mobile App)

January 2022

Software collects and stores users' sleeping cycle data throughout the day.

- Employed Content Prioritization, Intuitive Navigation, Error prevention, and other **UX/UI** principles.
- Rigorously unit tested the code for **IOS** and **Android** using **Ionic Lab**.
- Developed and designed the app using **Javascript** and **HTML** with the **Ionic** library.